



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R01-OAR-2008-0599 ; A-1-FRL-9716-7]

Approval and Promulgation of Air Quality Implementation Plans; New Hampshire; Regional Haze

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final Rule.

SUMMARY: EPA is approving a revision to the New Hampshire State Implementation Plan (SIP) that addresses regional haze for the first planning period from 2008 through 2018. The revision was submitted by the New Hampshire Department of Environmental Services (NHDES) on January 29, 2010, with supplemental submittals on January 14, 2011, and August 26, 2011. This revision addresses the requirements of the Clean Air Act (CAA) and EPA's rules that require States to prevent any future, and remedy any existing, manmade impairment of visibility in mandatory Class I Areas caused by emissions of air pollutants from numerous sources located over a wide geographic area (also referred to as the "regional haze program").

EFFECTIVE DATE: This rule is effective on **[Insert date 30 days from date of publication in the Federal Register]**.

ADDRESSES: EPA has established a docket for this action under Docket Identification No. EPA-R01-OAR-2008-0599. All documents in the docket are listed on the www.regulations.gov web site. Although listed in the index, some information is not publicly available, i.e., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form.

Publicly available docket materials are available either electronically through www.regulations.gov or in hard copy at the Office of Ecosystem Protection, U.S. Environmental Protection Agency, EPA New England Regional Office, Office of Ecosystem Protection, Air Quality Planning Unit, 5 Post Office Square - Suite 100, Boston, MA. EPA requests that if at all possible, you contact the contact listed in the **FOR FURTHER INFORMATION CONTACT** section to schedule your inspection. The Regional Office's official hours of business are Monday through Friday, 8:30 to 4:30, excluding legal holidays.

Copies of the documents relevant to this action are also available for public inspection during normal business hours, by appointment at the Air Resources Division, Department of Environmental Services, 6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095.

FOR FURTHER INFORMATION CONTACT: Anne McWilliams, Air Quality Unit, U.S. Environmental Protection Agency, EPA New England Regional Office, 5 Post Office Square – Suite 100, (Mail Code OEP05-02), Boston, MA 02109 – 3912, telephone number (617) 918-1697, fax number (617) 918-0697, e-mail mcwilliams.anne@epa.gov.

SUPPLEMENTARY INFORMATION:

Throughout this document whenever “we,” “us,” or “our” is used, we mean EPA.

The following outline is provided to aid in locating information in this preamble.

- I. Background and Purpose.
- II. Response to Comments.
- III. Final Action.

IV. Statutory and Executive Order Reviews.

I. Background and Purpose.

On February 28, 2012, EPA published a Notice of Proposed Rulemaking (NPR) for the State of New Hampshire. See 77 FR 11809. The NPR proposed approval of the New Hampshire State Implementation Plan (SIP) that addresses regional haze for the first planning period from 2008 through 2018. It was submitted by the New Hampshire Department of Environmental Services (NHDES) on January 29, 2010, with supplemental submittals on January 14, 2011, and August 26, 2011. Specifically, EPA proposed to approve New Hampshire's January 29, 2010 SIP revision, and its supplements, as meeting the applicable implementing regulations found in 40 CFR 51.308. EPA also proposed to approve, and incorporate into the New Hampshire SIP, New Hampshire's regulation Env-A 2300 Mitigation of Regional Haze and a permit for Public Service of New Hampshire (PSNH) Merrimack Station.

A detailed explanation of the requirements for regional haze SIPs, as well as EPA's analysis of New Hampshire's Regional Haze SIP submittal was provided in the NPR and is not restated here.

II. Response to Comments.

EPA received a number of comments on our proposal to approve New Hampshire's Regional Haze SIP submittal. Comments were received from NHDES, the U.S. Forest Service, the National Park Service (NPS), and the Sierra Club. The following discussion summarizes and responds to the relevant comments received on EPA's proposed approval of New Hampshire's Regional Haze SIP.

Comment: The U.S Forest Service commented that they are pleased that current permit conditions require Merrimack Station to submit calendar monthly emission rates for the preceding twelve months by December 31, 2014, in order to determine the maximum sustainable rate of control for the facility. In addition, they acknowledged the work that the State of New Hampshire has accomplished and encouraged the State of New Hampshire to continue to reduce regional haze.

Response: EPA acknowledges this comment from the U.S. Forest Service.

Comment: NHDES noted that EPA incorrectly referred to the New Hampshire Air Toxic Control Act, NH Revised Statutes Annotated (RSA) 125-I, and the regulations promulgated thereunder as requiring the installation of the wet flue gas desulfurization (FGD) system for mercury removal on the two coal-fired boilers at PSNH Merrimack Station. The correct citation is NH RSA 125-O, the Multiple Pollutant Reduction Program statute. The sections of the law that specifically address mercury removal and require a FGD system are RSA 125-O:11-18.

Response: EPA agrees that there was an error in the citation of the law requiring the FGD system.

Comment: NPS commented that the Best Available Retrofit Technology (BART) modeling and interpretation did not follow EPA's BART modeling guidelines or the methods recommended by the Mid-Atlantic/Northeast Visibility Union (MANE-VU) States and the Federal Land Managers (FLMs). NPS stated that since only one year of meteorological data was modeled, NHDES should have used the 20% best natural background visibility conditions in the modeling and reported the maximum visibility impact at the Class I areas due to the source's baseline emissions and emissions control options. NPS noted that in NHDES's August 2011 revision, the BART modeling was

partially corrected to use the natural background visibility, but still incorrectly reports the visibility impact for the 20% worst days and the 20% best days rather than the single day with the maximum visibility impact. NPS stated that while correcting the modeling results may not change the BART control decisions, EPA should not propose to approve methods and interpretations that are not consistent with the correct applications by the other MANE-VU States and States in other regions. NPS recommended that NHDES and EPA correctly report the maximum visibility impact from the BART units for baseline emissions and emissions control options.

Response: Upon further inspection of the model output, NHDES confirmed that the single day with the maximum visibility impact was used when determining the visibility improvement expected from the installation of potential BART control. The highest impact for the 20% worst natural days was used as the baseline condition for the determination of pre-control visibility impact and post-control visibility impact. The 20% worst natural visibility days were used instead of the 20% best natural visibility days because meteorological conditions prevalent during the 20% best natural visibility days are not conducive for transport from the New Hampshire BART sources to the nearby Class I Areas.

However, in response to the NPS's comment, NHDES did undertake a modeling analysis to rerun the pre- and post-BART emission scenarios using the 20% best natural visibility days as the baseline to determine the greatest visibility impact from the BART sources.¹ As an example of the revised modeling, Table 1 provides the updated visibility improvement in deciviews (dv) expected from the various sulfur dioxide (SO₂) control strategies that were assessed for Newington Station NT1 (specifically the lowering of the sulfur content of the fuel oil used).

¹ New Hampshire's additional modeling "6-2012 Revised BART Modeling Results – V2.pdf" is available in the docket to this rulemaking.

Table 1 - Cost and Visibility Impacts Projected from Implementation of SO₂ Control using the Revised NHDES Visibility Modeling

% Sulfur	Increased cost/hr		\$/ton SO ₂ reduced		Visibility Improvement At Acadia (dv)	Cumulative Visibility Improvement (dv)
	Low	High	Low	High		
2% to 1%	\$0.00	\$2,993	0	\$1,030	0.4	0.79
2% to 0.7%	\$1,346	\$4,712	\$402	\$1,407		
2% to 0.5%	\$2,020	\$6,059	\$528	\$1,583	0.62	1.21
2% to 0.3%	\$2,693	\$11,445	\$627	\$2,664	0.70	1.37

When using the 20% worst natural visibility days, the days in which the BART unit NT1 actually impacts the visibility in the nearby Class I areas, the visibility improvement between the selected level of SO₂ control (lowering the SO₂ emission limit to the equivalent of requiring 0.5% sulfur fuel oil) and the more stringent level of SO₂ control (lowering the SO₂ emission limit to the equivalent of requiring 0.3% sulfur fuel oil) is 0.06 dv (0.11 dv cumulative).² The corresponding visibility improvement using the 20% best natural visibility days is 0.08 dv (0.16 dv cumulative). Thus, the NPS comment has been addressed. EPA finds that the NHDES modeling is consistent with the methods recommended by MANE-VU and the FLMs.

Comment: Sierra Club referenced EPA's proposal to approve the New Hampshire determination that BART for Merrimack is wet scrubbers and a 90% reduction in SO₂ emissions, based on "[c]urrent permit conditions." Sierra Club asserted that while it is correct that wet scrubbers are BART for Merrimack, the SIP sets far too lax an emission standard for SO₂. Sierra Club also referenced the BART analysis for Merrimack Station which notes that SO₂ removal efficiencies for wet scrubbers in general range up to 97%, and for "new Flue Gas Desulfurization (FGD)

² See EPA's NPR on New Hampshire SIP revision, 77 FR 11809, for the visibility impact using the 20% worst natural visibility background conditions for the Newington Station NT1 BART SO₂ analysis.

systems...the presumptive norm is 95 percent reduction of SO₂ emissions.” Similarly, MANE-VU analysis “recommends [a] limit of 95 % reduction in SO₂ emissions.”

Furthermore, Sierra Club included a progress report developed by the operator of Merrimack, which states that the newly-installed scrubbers are actually removing far more than 90% of the SO₂ from the plant’s exhaust stream. In the report, PSNH notes that the scrubbers are demonstrating “exceptional success” and that “[s]ulfur dioxide removal from boiler flue-gas is approximately 96-98%.” See Public Service Company of New Hampshire Merrimack Station Scrubber Project Progress Report (March 22, 2012).³ Sierra Club concludes that there is no justification for the SIP’s determination that BART for Merrimack consists of a mere 90% reduction in SO₂ emissions, when the presumptive standard would involve releasing half as much SO₂, and the facility is already claiming to emit less than a third as much. Sierra Club recommends that BART for Merrimack Station MK2 should involve at least a 97% SO₂ reduction rate.

Response: The installation of the wet scrubber is the result of state legislation requiring the reduction of mercury emissions from Merrimack Station Units MK1 and MK2.⁴ The wet scrubber has the co-benefit of reducing SO₂ emissions, a visibility impairing pollutant. The wet scrubber has been configured to maximize the mercury emission reduction. It was not known at the time of the BART determination what the SO₂ control efficiency would be under the current configuration. Current permit conditions require the facility to submit calendar monthly emission rates for the preceding 12 months by December 31, 2014. At that time, New Hampshire will determine the maximum sustainable rate of control. As specified by permit conditions, in no case may this rate be

³ This document is available in the docket to this rulemaking.

⁴ See Multiple Pollutant Reduction Program, NH RSA 125-O:11-18.

less than 90% control. As supported by preliminary reports, it is expected that the scrubber will provide greater than 90% SO₂ control.

For the MK2 BART determination, NHDES considered the existing control, the wet scrubber which is calibrated for the removal of mercury. NHDES selected an approach that reasonably balances mercury removal with a sustainable level of SO₂ removal. EPA finds that the approach to setting BART level of controls for MK2 taken by New Hampshire is reasonable.

Comment: The Sierra Club noted that, since the BART analysis for Merrimack was based in part on Merrimack's actual historical capacity factors, any increase in Merrimack's capacity factor will result in increased emissions and negative impacts on visibility in ways that the SIP will fail to address. According to Sierra Club, the SIP should therefore be amended to restrict Merrimack's emissions not only on a basis of pollutants-per-MMBtu, but also through reference to Merrimack's actual historical level of operation. Put another way, Sierra Club suggested that the SIP must be revised to restrict Merrimack's operation to the capacity factors relied upon in the BART analysis.

Response: According to the BART Guidelines,⁵ when calculating the average cost of control, "The baseline emission rate should represent a realistic depiction of anticipated annual emissions for the source. In general, for the existing sources subject to BART, you will estimate the anticipated annual emissions from a baseline period. In the absence of enforceable emission limitations, you calculate baseline emissions based upon continuation of past practices." On the other hand, the BART Guidelines require enforceable limitations if the utilization or other parameters used to determine future emissions *differ* from past practice. See BART Guidelines

⁵ Guidelines for BART Determinations Under the Regional Haze Rule at Appendix Y to 40 CFR part 51.

Section D. Step 4.d (70 FR 39156, 39167, July 6, 2005). The utilization and parameters used in the BART analysis for Merrimack are consistent with baseline conditions and past practices, therefore the parameters used, including capacity factor, are not required to be enforceable. On the point of requiring a lb/MMBtu limit instead of a percent control efficiency limit, the BART guidelines list the presumptive levels in units of lb/MMBtu or a percent reduction, and thus we are approving the State's approach of percent control as being consistent with the guidelines.

Comment: NPS commented that NHDES should have considered Advanced Separated Overfire Air (ASOFA) as an oxides of nitrogen (NO_x) control option for Merrimack Station MK2 in addition to the existing SCR. NPS asserted that the addition of ASOFA would result in a NO_x rate of 0.24 lb/MMBtu instead of the proposed 0.30 lb/MMBtu 30-day rolling average. NPS indicated that a 25% NO_x reduction would provide 0.5 *cumulative* deciview of visibility improvement at Acadia National Park, Great Gulf Wilderness Area, and Lye Brook Wilderness Area. NPS reviewed four other coal/lignite-fired cyclone boilers (Kincaid in IL and Leland Olds #2 and Milton R. Young #1 & #2 in ND) that are subject to BART. NPS noted that the Kincaid electrical generating unit (EGU) is already equipped with overfire air (and SCR), and the three cyclone boilers in ND will install ASOFA and Selective Non-Catalytic Reduction (SNCR) as BART. NPS cited the estimated NO_x emission reductions from the installation of ASOFA for Leland Olds #2 (LOS2), Milton R. Young #1 (MRY1) and Milton R. Young #2 (MRY2) as 28%, 39.5%, and 37.7%, respectively.

Response: Merrimack Station Unit MK2 is a 320 mega-watt (MW) coal-fired cyclone boiler. MK2 fires bituminous coal rather than lignite used in the units discussed by NPS. Bituminous coal ash becomes fluid at a higher temperature than lignite coal ash. This means that a higher

combustion temperature is needed in bituminous coal boilers to ensure coal ash remains fluid and is properly removed from the boiler. Improper removal of coal ash can cause the boiler to plug with coal ash, shutting down combustion or creating unsafe operating conditions, and requiring maintenance for coal ash removal.

The installation of ASOFA would lower the combustion temperature and degrade the performance of the boiler. Due to the different properties of the fuels used, EPA does not agree that Merrimack Station Unit MK2 would achieve the same NO_x emission reduction from ASOFA as estimated for the cited units.

In addition, the North Dakota units lacked any NO_x control in the BART baseline, therefore the expected visibility improvement at the highest impacted Class I area due to installation of BART control is 2.9 dv for MRY1, 3.379 dv for MRY2, and 3.9 dv for LOS2. See 76 FR 58570 (Sept. 21, 2011). By comparison, Merrimack Station MK2 has an existing SCR. The greatest expected visibility improvement from the installation of ASOFA at MK2, using the NPS estimate of 25% reduction in NO_x, would be 0.2 dv at Acadia, 0.2 dv at Great Gulf, and 0.1 dv at Lye Brook. It is unlikely that the projected visibility improvement at these Class I areas would be cost-effective considering the cost of installation of ASOFA, the potential for degraded performance, and the increase in maintenance costs. EPA finds that the NHDES determination that SCR represents BART for Merrimack Station Unit MK2 is reasonable.

Comment: NPS commented that the emission limit for the electrostatic precipitators (ESPs) should reflect the actual capabilities of the units, 0.019 lb total suspended particulate (“TSP”) per MMBtu instead of the proposed limit of 0.08 lb TSP/MMBtu.

Response: The BART Guidelines state “emission limits must be enforceable as a practical matter.” The MANE–VU recommended particulate matter (PM) limit for non-CAIR EGUs, such as MK2, is 0.02–0.04 lb/MMBtu.⁶ NHDES decided to provide some level of flexibility to Merrimack Station which has a source subject to BART (MK2) and a source not subject to BART (MK1). MK2 and MK1 will share a stack with the installation of the new FGD. If only MK1 operated, the emission limit required by New Hampshire would represent a decrease of 70.4% from the MK1 emission limit of 0.27 lb/MMBtu. At worst, when only MK2 is operating, the emission limit represents a decrease of 64.8% from the currently permitted limit of 0.227 lb/MMBtu. The emission limit chosen by New Hampshire also results in a lower emission rate from the combined units than if New Hampshire had only required MK2 to meet the limit suggested by MANE–VU.⁷ Therefore New Hampshire’s proposed BART control limit for PM is consistent with the MANE–VU recommended emission limit while providing flexibility to operate a shared stack. Considering the current controls on emissions from Merrimack Station—two ESPs in series—as well as the reductions guaranteed by New Hampshire’s limits, EPA finds that NHDES was reasonable in establishing the TSP emission limit for MK2.

Comment: The Sierra Club commented that the New Hampshire haze SIP proposes that an emission limit of 0.08 lbs TSP/MMBtu comports with BART. However, the Sierra Club indicated that this limit is much higher than what is achievable by the PM controls at Merrimack and with

⁶ The MANE–VU Workgroup Recommended level of BART control can be found in Attachment W—“MANE–VU Five-Factor Analysis of BART eligible Sources” of the New Hampshire Regional Haze SIP submittal available in the docket for this rulemaking.

⁷ For the “bubble,” the combined emission rate if both units are operating is 377 lb/hr:

$$0.08 \text{ lb/MMBtu} \times 4,711 \text{ MMBtu/hr} = 377 \text{ lb/hr.}$$

Without the “bubble,” the sum of the individual emission rates applying MANE–VU’s presumptive PM emission limit of 0.04 lb/MMBtu would be 473 lb/hr:

$$(0.04 \text{ lb/MMBtu} \times 3,473 \text{ MMBtu/hr}) + (0.27 \text{ lb/MMBtu} \times 1,238 \text{ MMBtu/hr}) = 473 \text{ lb/hr.}$$

New Hampshire’s approach therefore results in a decrease of almost 100 lb/hr beyond what application of the MANE–VU suggested limit would require.

BART. The Sierra Club cited the MANE-VU analysis which recommends a “particulate matter limit of 0.02-0.04 lb/MMBtu” for Merrimack unit MK2. Similarly, the Merrimack BART Analysis noted that stack tests for Merrimack have recorded actual PM emissions of as low as 0.021 lbs TSP/MMBtu. The Sierra Club concluded that this would support a determination that an appropriate BART limit for Merrimack would be 0.02 lbs TSP/MMBtu. However, the SIP proposes an emission limit of 0.08 lbs TSP/MMBtu for both units which would result in emissions “less than the total allowable TSP emissions . . . in which a limit for Unit MK2 were revised to 0.04 lb/MMBtu and the limit for Unit MK1 remained unchanged.” The Sierra Club acknowledged that while salutary—and potentially necessary to ensure that New Hampshire meets its reasonable progress goals—the Sierra Club does not think the implementation of a limit for unit MK1 has any bearing on what BART-derived limit is consistent with what is “achievable through the application of the best system of continuous emission reduction” for MK2. Sierra Club stated that New Hampshire may not quadruple the emissions from a BART-eligible unit and call it BART just because it also proposes to limit emissions from another source elsewhere. The limits applicable to MK2 are derived from what may be achieved from the best available retrofit technology. Here, that technology supports an emissions limit of 0.02 lbs TSP/MMBtu; Sierra Club indicated that this limit, and not 0.08 lbs TSP/MMBtu, should be set as BART in the SIP. In addition, to ensure that particulate matter emission reductions are being achieved, the Sierra Club commented that the SIP should require continuous emissions monitoring for particulate matter.

Response: With the installation of the FGD, MK1 and MK2 share a common stack and the EPA finds that NHDES has acted reasonably in setting an emission limit that accounts for, and reduces, emissions from both units. The permit conditions require stack testing post emission controls, and therefore the TSP emissions from MK1 must be considered when developing the TSP emission

limit for MK2. Sierra Club has incorrectly characterized New Hampshire's Regional Haze SIP as allowing emissions from a BART-eligible unit to quadruple. As noted in the response above, even under the worst case scenario where only MK2 is operating, New Hampshire's approach results in a decrease of approximately 65% TSP. Assuming dual operation of MK1 and MK2, New Hampshire's approach results in nearly 100 lb TSP/hr *less* than the limit MANE-VU, and Sierra Club, recommend.

As to the Sierra Club suggestion of requiring a CEM for particulate matter, current federally enforceable permit conditions require the continuous operation of the existing ESPs. While emission limits must be enforceable as a practical matter, the BART Guidelines clearly state that continuous emission monitors (CEMs) are not required in every instance. See 70 FR 39172, July 6, 2005. Moreover, the BART Guidelines recognize that monitoring requirements are in many instances governed by other regulations, such as compliance assurance monitoring.

EPA reiterates that New Hampshire has reasonably developed a control level of MK2 that provides for significant emissions reductions and operational flexibility.⁸

Comment: Sierra Club commented that the SIP does not explicitly include requirements for continuous operation of either the PM or SO₂ controls.

Response: With respect to SO₂ controls, the operating permit submitted as part of the New Hampshire haze SIP states, "Beginning on July 1, 2013, the Owner shall not operate MK2 unless

⁸ Sierra Club also commented that EPA should "address *all* particulate matter, not just TSP." Total suspended particulates, or TSP, is the measure of total particulate matter, regardless of size, and therefore accounts for all particulate matter emissions.

MK2-PC7 (the scrubber) is in operation.”⁹ EPA proposed to approve this permit and incorporate it into the SIP on Feb 28, 2012. See 77 FR 11809. EPA is approving this permit in today’s action. With respect to PM controls, as discussed in the previous response, the existing federally enforceable Title V permit requires continuous ESP operation to meet permit limits.¹⁰

Comment: The Sierra Club observed that much of the New Hampshire haze SIP is based on modeling and other determinations developed as part of the MANE-VU regional planning organization analysis incorporating pollution and visibility data from a wide range of states and tribal entities. MANE-VU member state and tribal governments include: Connecticut, Delaware, the District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Penobscot Indian Nation, Rhode Island, and Vermont. Sierra Club noted that implicit in the New Hampshire haze SIP is the understanding that each individual entity within MANE-VU will achieve the reductions specified for each jurisdiction. Accordingly, the limits and goals for reasonable progress determined in the New Hampshire SIP are based on the reductions in other jurisdictions being met.

Sierra Club asserted that not all MANE-VU jurisdictions are, in fact, on target to meet their reductions. According to Sierra Club, to the extent that the assumptions underpinning the reasonable progress goals in the New Hampshire haze SIP are thereby impacted, the accuracy of the analysis in the SIP should be re-examined.

⁹ See Public Service of New Hampshire Merrimack Station Temporary Permit TP-0008 Table 4, Item 7. This document is available in the docket for this rulemaking.

¹⁰ See Public Service of New Hampshire Merrimack Station Title V Permit Table 5, Item 7, condition B. This document is available in the docket for this rulemaking.

Response: The EPA notes that the Regional Haze Rule (RHR) requires States to determine what constitutes reasonable progress by, among other things, consideration of the four statutory factors. The RHR states that the determination of what constitutes reasonable progress can only be made once the necessary technical analyses of emissions, air quality, and the reasonable progress factors have been conducted. See 64 FR 35721, July 1, 1999. The RHR states the following: “Once a State has adopted a reasonable progress goal and determined what progress will be made toward that goal over a 10-year period, the goal itself is not enforceable. All that is ‘enforceable’ is the set of control measures which the State has adopted to meet that goal. If the State's strategies have been implemented but the State has not met its reasonable progress goal, the State could either: (1) Revise its strategies in the SIP for the next long-term strategy period to meet its goal, or (2) revise the reasonable progress goals for the next implementation period. In either case, the State would be required to base its decisions on appropriate analyses of the statutory factors included in 40 CFR 51.308(d)(1)(i)(A) and (B) of the final rule.” See 64 FR 35733, July 1, 1999.

Consistent with 40 CFR 51.308(g), New Hampshire has committed to submit to EPA a progress report, in the form of a SIP revision, every five years following the initial submittal of the SIP. The report will evaluate the progress towards the reasonable progress goal for each mandatory Class I area located within the State and in each mandatory Class I area located outside the State that may be affected by emissions from within the State. At this time, New Hampshire will also determine the adequacy of the existing implementation plan. See 40 CFR 51.308(h).

Sierra Club is correct to point out that implementation of the regional haze program in one State is to a certain extent interconnected with implementation in other States. However, requiring

constant revision to modeled emission levels prior to implementation would create indecisiveness and gridlock and would stall implementation of emissions reductions. EPA adopted the above mentioned aspects of the Regional Haze Rule to allow adjustments of State planning goals during, and at the end of, each planning period to account for any discrepancies between projected and actual emissions reductions both within the State and from other States. EPA disagrees with Sierra Club and does not find that New Hampshire must reevaluate the modeling in its SIP at the present time.

Comment: NPS commented that NHDES is not proposing emission reductions sufficient to meet the MANE-VU ask. The FLMs disagree with EPA's proposal to approve New Hampshire's plan and recommend the EPA disapprove the New Hampshire plan because it does not meet the reasonable progress goals set by New Hampshire.

Response: New Hampshire, in cooperation with the MANE-VU States, developed the MANE-VU "Ask" that will provide for reasonable progress towards achieving natural visibility at the MANE-VU Class I areas. The "Ask" consists of: (a) timely implementation of BART requirements; (b) a 90 percent reduction in SO₂ emissions from each of the EGU stacks identified by MANE-VU comprising a total of 167 stacks; (c) adoption of a low sulfur fuel oil strategy; and (d) continued evaluation of other control measures to reduce SO₂ and NO_x emissions. While New Hampshire is not adopting a low sulfur fuel oil strategy as part of this submittal, it is expected that the FGD for Merrimack Station MK1 and MK2 will provide greater than 90% SO₂ control. In addition, SO₂ emissions in New Hampshire have been reduced through the conversion of coal-fired Unit 5 at Schiller Station to a biomass-firing unit and the shutdown of Fraser LLC pulp and paper

mill.¹¹ The reasonable progress goal developed by New Hampshire, along with the other MANE-VU States is a goal and not in of itself enforceable. As noted in the above response, New Hampshire will have the opportunity to assess the reasonable progress goals and the State's control strategies as part of the 5-year review. EPA reiterates that the SO₂ emission reductions included in the New Hampshire Regional Haze SIP are comparable to reductions from the MANE-VU "Ask" and will be sufficient to assure progress toward the natural visibility goal for the New Hampshire Class I areas for the first planning period.

Comment: The Sierra Club commented that the MANE-VU four factor analysis for reasonable progress determined that "reductions in SO₂ emissions from EGU and non-EGU industrial point sources will result in the greatest improvements in visibility in the MANE-VU region, more than any other visibility-impairing pollutant." See 77 FR 11816, February 28, 2012. MANE-VU thus recommended a 90% reduction in SO₂ emissions from EGU emissions points. The Sierra Club indicated that PSNH Schiller Station in Portsmouth, New Hampshire, is one of the largest sources of SO₂ pollution in New Hampshire, emitting 3,549 tons of SO₂ in 2009 and 1,706 tons in 2010, according to EPA's Clean Air Markets Database. The Sierra Club also stated that in recent years, Schiller is emitting SO₂ at levels below historical norms for operation of the facility and credited this emission reduction to the recent economic downturn.

Sierra Club continued that while this emission reduction results in less haze-causing air pollution in New Hampshire, the temporary emissions reductions owing to the economic downturn and attendant diminished output capacity at Schiller will not be permanent. Thus, Sierra Club concluded that if these capacities are relied upon in reasonable progress determinations for the New

¹¹ The annual 2002 SO₂ emissions from Schiller Station Unit 5 and Fraser LLC were 2,796 tons and 638 tons, respectively.

Hampshire Class I areas, they must be made enforceable, with permit conditions limiting the hours of operation or automatically requiring additional controls in the event that specific annual usage is exceeded. This is critical given the historic fluctuations in emission levels at Schiller.

Sierra Club also stated that to the extent that the decreased SO₂ emissions are due to Schiller's conversion of one of its coal-fired boilers to burn biomass, these reductions should be made enforceable by requiring that Schiller not burn any coal in that boiler. Otherwise, should economic conditions change or Schiller's operator change its mind about what it would like to burn in that boiler, the visibility gains factored into the SIP's reasonable progress planning would be jeopardized.

Response: As noted above, the "Ask" calls for a 90% reduction in SO₂ emissions from the top 167 impacting electrical generating units (EGUs). MANE-VU modeling did not indicate that units at Schiller Station were amongst the highest contributors to visibility impairment at any nearby Class I area.¹² The modeling was conducted using 2002 emissions, prior to any economic downturn.

As indicated by Sierra Club, in 2006, Public Service of New Hampshire converted one of the three 50 MW units from coal burning to biomass burning. The permit modification to convert to biomass burning was undertaken through the federally approved permit process and any modification that increases emissions above the applicable level would require a federally approved permit. EPA relied upon this conversion to biomass, and the related emissions reductions, and not

¹² For a list of the 167 highest visibility impacting EGUs, see Attachment Y of the New Hampshire Regional Haze submittal, available in the docket for this rulemaking.

on any decreased utilization of other units at Schiller in evaluating New Hampshire's plans to achieve reasonable progress.

Comment: NPS observed that EPA states in the NPR: "New Hampshire relied on emission reductions from a number of ongoing and expected air pollution control programs as part of the State's long term strategy. For electrical generating units (EGUs), New Hampshire's Regulation Chapter Env-A 3200, NOx Budget Trading Program limits ozone season NOx emissions on all fossil-fuel fired EGUs greater than 15 MW located in Hillsborough, Merrimack, Rockingham, and Strafford Counties to 0.15 lb/MMBtu. However, a unit can meet this limit via NOx credits."

The NPS commented that Clean Air Markets data indicates that MK1 is not meeting the 0.15 lb/MMBtu target. NPS noted that since New Hampshire is not included in the NOx State Implementation Plan Call, the Clean Air Interstate Rule, or the Cross State Air Pollution Rule, the NPS is not aware of any NOx trading approach that NHDES is relying on to meet the 0.15 lb/MMBtu target. In the absence of any discussion by NHDES or EPA regarding additional control of emissions from MK1, the NPS can only state that a four-factor reasonable progress analysis is required, and NPS believes it is likely that they would have similar comments regarding SO₂ and NOx emissions from MK1 as they do for MK2.

Response: NHDES and MANE-VU undertook a four factor analysis for reasonable progress. MANE-VU identified SO₂ as the main contributor to visibility impairment for this first planning period. The result of the four factor analysis was the MANE-VU "Ask." As part of the MANE-VU "Ask," New Hampshire agreed to require MK1 to reduce SO₂ emissions by 90%. The

operating permit submitted as part of the New Hampshire SIP requires MK1 to meet at least 90% reduction with the installation of the wet scrubber.¹³

NPS is correct that New Hampshire is not part of the NO_x State Implementation Plan Call, the Clean Air Interstate Rule, or the Cross State Air Pollution Rule. However, New Hampshire was included in the earlier NO_x Budget Program that was developed via a Memorandum of Understanding of the Ozone Transport Commission. See 65 FR 68078 (March 9, 2000). Since New Hampshire was not included in the subsequent trading programs, New Hampshire's program is for all intents and purposes an intrastate NO_x credit trading program. The New Hampshire NO_x Budget program requires MK1 to meet an ozone season emission limit of 0.15 lb/MMBtu or 75% NO_x control from the 1990 baseline, whichever is less stringent. NPS is correct in that MK1 is not meeting an ozone season emission limit of 0.15 lb/MMBtu, but is meeting 75% NO_x control from the 1990 baseline.

In addition to the ozone season NO_x Budget Program, MK1 is subject to the NO_x Reasonably Achievable Control Technology (RACT) program. Pursuant to RACT Order ARD-97-001 issued in accordance with New Hampshire's Env-A 1211 which was approved into the SIP on July 23, 2002, (67 FR 48033), MK1 is required to meet 18.1 tons NO_x per 24-hour calendar day when MK2 is not in full operation and 29.1 tons per calendar day when combined with MK2.

III. Final Action

EPA is approving New Hampshire's January 29, 2010 SIP revision and supplemental submittals on January 14, 2011 and August 26, 2011, as meeting the applicable implementing regulations

¹³ See PSNH Merrimack Station Temporary Permit TP-008 Table 4, Item 8, condition a. This document is available in the docket for this rulemaking.

found in 40 CFR 51.308. EPA is also approving, and incorporating into the New Hampshire SIP, New Hampshire's regulation Env-A 2300 Mitigation of Regional Haze and PSNH Merrimack Station Temporary Permit TP-0008 Flue Gas Desulfurization System dated March 9, 2009, and reissued August 2, 2010, and July 8, 2011.

IV. Statutory and Executive Order Reviews.

Under the Clean Air Act, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve State choices, provided that they meet the criteria of the Clean Air Act. Accordingly, this action merely approves State law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- is not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);

- is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the Clean Air Act; and
- does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, this rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the SIP is not approved to apply in Indian country located in the State, and EPA notes that it will not impose substantial direct costs on tribal governments or preempt tribal law.

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the Federal Register. A major rule cannot take effect until 60 days after it is published in the Federal Register. This action is not a “major rule” as defined by 5 U.S.C. 804(2).

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by [FEDERAL REGISTER OFFICE: insert date 60 days from date of publication of this document in the Federal Register].

Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See Section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Carbon monoxide, Incorporation by reference, Intergovernmental relations, Lead, Nitrogen dioxide, Ozone, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides, Volatile organic compounds.

Dated: July 12, 2012

H. Curtis Spalding,
Regional Administrator,
EPA Region 1.

40 CFR part 52 is amended as follows:

PART 52 - [AMENDED]

1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 et seq.

Subpart EE – New Hampshire

2. Section 52.1520 is amended by adding a new entry to the Table in paragraph (c) in alphanumeric order, and by adding new entries to the end of the Tables in paragraphs (d) and (e), to read as follows:

§ 52.1520 Identification of plan.

* * * * *

(c) *EPA approved regulations.*

EPA-Approved New Hampshire Regulations

State citation	Title/subject	State effective date	EPA approval date ¹	Explanations
**	*	*	*	**
Env-A 2300	Mitigation of Regional Haze	1/8/11	[Insert date of FR publication] [Insert Federal Register page number where the document begins]	
**	*	*	*	**

¹In order to determine the EPA effective date for a specific provision listed in the table, consult the Federal Register notice cited in this column for the particular provision.

(d) *EPA-approved State Source specific requirements.*

EPA-Approved New Hampshire Source Specific Requirements

Name of source	Permit No.	State effective date	EPA approval date ²	Additional explanations/§52.1535 citation
**	*	*	*	**
PSNH Merrimack Station	TP-0008	7/8/2011	[Insert date of FR publication] [Insert Federal Register page number where the document begins]	Flue Gas Desulfurization System

² In order to determine the EPA effective date for a specific provision listed in this table, consult the Federal Register notice cited in this column for the particular provision.

(e) *Nonregulatory.*

New Hampshire Non Regulatory

Name of nonregulatory SIP provision	Applicable geographic or nonattainment area	State submittal date/effective date	EPA approved date ³	Explanations
**	*	*	*	**
New Hampshire Regional Haze SIP and its supplements	Statewide	1/29/2010; supplements submitted 1/14/2011 8/26/2011	[Insert date of FR publication] [Insert Federal Register page number where the document begins]	

³ In order to determine the EPA effective date for a specific provision listed in this table, consult the Federal Register notice cited in this column for the particular provision.